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PTO/SB/82 (06-03)

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Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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**REVOCATION OF POWER OF ATTORNEY  
WITH NEW POWER OF ATTORNEY  
AND  
CHANGE OF CORRESPONDENCE ADDRESS**

Application Number	09/609,021
Filing Date	June 30, 2000
First Named Inventor	Ronald Reiger
Art Unit	2681
Examiner Name	David Q. Nguyen
Attorney Docket Number	65187-189

**I hereby revoke all previous powers of attorney given in the above-identified application:**☒ A Power of Attorney is submitted herewith.**OR**☐ I hereby appoint the practitioners at Customer Number:☒ Please change the correspondence address for the above-identified application to:☒ The address associated with  
Customer Number:**22504****OR**☐ Firm or  
Individual Name

Address

Address

City

Country

State

ZIP

Telephone

Fax

I am the:

☐ Applicant/Inventor.☒ Assignee of record of the entire interest. See 37 CFR 3.71.*Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)***SIGNATURE of Applicant or Assignee of Record**

Name John Saw, Vice President

Signature 

Date

1/5/05

Telephone

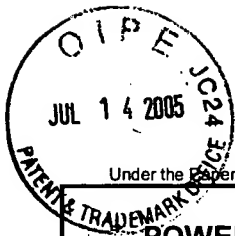
425-216-7600

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.



\*Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.36. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**



EXPRESS MAIL NO. 484956964US

PTO/SB/81 (09-03)

Approved for use through 11/30/2005 OMB 0651-0035

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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**POWER OF ATTORNEY  
and  
CORRESPONDENCE ADDRESS  
INDICATION FORM**

<b>Application Number</b>	09/609,021
<b>Filing Date</b>	June 30, 2000
<b>First Named Inventor</b>	Ronald Reiger
<b>Title</b>	METHOD AND APPARATUS FOR USE IN REDUCING OVERUTILIZATION OF RF COMMUNICATION SYSTEM RESOURCES
<b>Group Art Unit</b>	2681
<b>Examiner Name</b>	David Q. Nguyen
<b>Attorney Docket Number</b>	65187-189

I hereby appoint:

☒ Practitioners at Customer Number:

22504

OR

☐ Practitioner(s) named below:

Name	Registration Number

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the Patent and Trademark Office connected therewith.

Please recognize or change the correspondence address for the above-identified application to:

☒ The above-mentioned Customer Number.

OR

☐ The address associated with Customer Number:

OR

<input type="checkbox"/> Firm or Individual Name					
Address					
Address					
City		State		ZIP	
Country					
Telephone		Fax			

I am the:

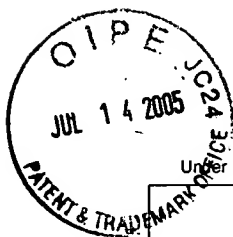
☐ Applicant/Inventor.☒ Assignee of record of the entire interest. See 37 CFR 3.71.  
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).**SIGNATURE of Applicant or Assignee of Record**

Name	John Saw, Vice President		
Signature			
Date	1/5/05	Telephone	425-216-7600

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

☒ \*Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.131 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14.



EXPRESS MAIL NO. 484956964US

PTO/SB/96 (08-03)

Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**STATEMENT UNDER 37 CFR 3.73(b)**

Applicant/Patent Owner: Ronald Reiger et al.

Application No./Patent No.: 09/609,021 Filed/Issue Date: June 30, 2000

Entitled: METHOD AND APPARATUS FOR USE IN REDUCING OVERUTILIZATION OF RF COMMUNICATION SYSTEM RESOURCES

Clearwire Corporation

(Name of Assignee)

a

corporation

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or  
2. ☐ an assignee of an undivided part interest

in the patent application/patent identified above by virtue of either:

- A. ☐ An assignment from the inventor(s) of the patent application/patent identified above.  
The assignment was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

- B. ☒ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: Ronald Reiger

To: AT&T Wireless Services, Inc.

The document was recorded in the United States Patent and Trademark Office at  
Reel 010980, Frame 0104, or for which a copy thereof is attached

2. From: Matthew Katinsky

To: AT&T Wireless Services, Inc.

The document was recorded in the United States Patent and Trademark Office at  
Reel 012414, Frame 0589, or for which a copy thereof is attached

3. From: AT&T Wireless Services, Inc.

To: Clearwire Corporation

The document was recorded in the United States Patent and Trademark Office at  
Reel 015177, Frame 0566, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☒ Copies of assignments or other documents in the chain of title noted in B above are attached.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.8]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

1/5/05  
Date

John Saw  
Typed or printed name

[Signature]  
Signature

Vice President  
Title

## ASSIGNMENT AND AGREEMENT

For value received, we, Ronald Reiger, of Redmond in the County of King and State of Washington, and Matthew Katinsky, of Seattle in the County of King and State of Washington, hereby sell, assign and transfer to AT&T Wireless Services, Inc., a corporation of the State of Delaware, having an office at 7277 164<sup>th</sup> Avenue NE, Redmond, Washington 98052, and its successors, assigns and legal representatives, the entire right, title and interest, for the United States of America, in and to certain inventions related to **Method And Apparatus For Use In Reducing Overutilization Of RF Communication System Resources**, described in an application for Letters Patent of the United States, executed by us of even date herewith, and based on our prior provisional application, Serial No. 60/147,298, filed August 4, 1999, and all the rights and privileges in said application and under any and all Letters Patent that may be granted in the United States for said inventions; and we also concurrently hereby sell, assign and transfer to AT&T Wireless Services, Inc., the entire right, title and interest in and to said inventions for all countries foreign to the United States, including all rights of priority arising from the application aforesaid, and all the rights and privileges under any and all forms of protection, including Letters Patent, that may be granted in said countries foreign to the United States for said inventions.

We authorize AT&T Wireless Services, Inc. to make application for such protection in its own name and maintain such protection in any and all countries foreign to the United States, and to invoke and claim for any application for patent or other form of protection for said inventions, without further authorization from us, any and all benefits, including the right of priority provided by any and all treaties, conventions, or agreements.

We hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of AT&T Wireless Services, Inc. to apply for patent or other form of protection for said inventions and to claim the aforesaid benefit of the right of priority.

We request that any and all patents for said inventions be issued to AT&T Wireless Services, Inc. in the United States and in all countries foreign to the United States, or to such nominees as AT&T Wireless Services, Inc. may designate.

We agree that, when requested, we shall, without charge to AT&T Wireless Services, Inc. but at its expense, sign all papers, and do all acts which may be necessary, desirable or convenient in connection with said applications, patents, or other forms of protection.

Ronald Reiger  
Ronald Reiger

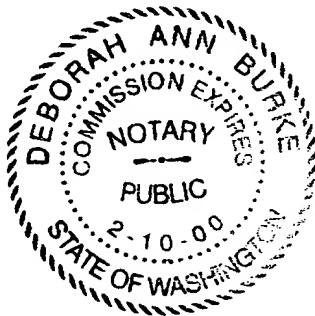
Date: 1/14/2000

United States of America )

State of WA )ss:

County of King )

On this 14th day of January, 2000, before me personally came Ronald Reiger, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.



Deborah Ann Burke  
Notary Public

ASSIGNMENT AND AGREEMENT

For value received, each of the undersigned, Matthew Katinsky of Seattle in the County of King County and State of Washington, and Ron Reiger of Redmond in the County of King County and State of Washington, hereby sells, assigns and transfers to AT&T Wireless Services, Inc., a corporation of the State of Delaware, having an office at 7277 164th Avenue NE, Redmond, Washington 98052, United States of America, and its successors, assignees and legal representatives, the entire right, title and interest, for the United States of America, in and to certain inventions related to

**Method And Apparatus For Use In Reducing Overutilization Of RF  
Communication System Resources**

described in an application for Letters Patent for the United States of America,

☐ for which an application for a United States Patent was executed on \_\_\_\_\_

☒ for which an application for a United States Patent was filed on 06/30/2000 Application Number 09/609021,

and all the rights and privileges in said application and under any and all Letters Patent that may be granted in the United States for said inventions; and the undersigned also concurrently hereby sell, assign and transfer to AT&T Wireless Services, Inc. the entire right, title and interest in and to said inventions for all countries foreign to the United States, including all rights of priority arising from the application aforesaid, and all the rights and privileges under any and all forms of protection, including Letters Patent, that may be granted in said countries foreign to the United States for said inventions.

The undersigned authorize AT&T Wireless Services, Inc. to make application for such protection in its own name and maintain such protection in any and all countries foreign to the United States, and to invoke and claim for any application for patent or other form of protection for said inventions, without further authorization from the undersigned, any and all benefits, including the right of priority provided by any and all treaties, conventions, or agreements.

The undersigned hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of AT&T Wireless Services, Inc. to apply for patent or other form of protection for said inventions and to claim the aforesaid benefit of the right of priority.

The undersigned request that any and all patents for said inventions be issued to AT&T Wireless Services, Inc. in the United States and in all countries foreign to the United States, or to such nominees as AT&T Wireless Services, Inc. may designate.

The undersigned agree that, when requested, the undersigned shall, without charge to AT&T Wireless Services, Inc. but at its expense, sign all papers, and do all acts which may be necessary, desirable or convenient in connection with said applications, patents, or other forms of protection.

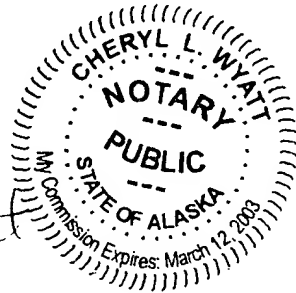
Matthew Katinsky  
Matthew Katinsky

Date: 10/12/00

United States of America

State of Alaska

County of 3rd Judicial district



On this 12 day of October, 2000 before me personally came Matthew Katinsky, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

Cheryl L. Wyatt  
Notary Public

Commission expires 3/12/2003

AT&T CORP.

P.O. Box 4110

Middletown, New Jersey 07748-4110



ASSIGNMENT

WHEREAS, AT&T Wireless Services, Inc. (hereinafter referred to as ASSIGNOR), a corporation of the State of Delaware having a place of business at 16331 NE 72nd Way, Redmond, Washington 98052, is the owner of rights in patents and patent applications in the United States and internationally as set forth in the SCHEDULE OF PATENTS/PATENT APPLICATIONS annexed hereto (hereinafter Patent Rights) ;

WHEREAS, Clearwire Corporation (hereinafter referred to as ASSIGNEE), a corporation of the State of Delaware having a place of business at 10210 N.E. Points Drive, Suite 210, Kirkland, Washington 98033, is desirous of acquiring ASSIGNOR's entire right, title and interest in and to said Patent Rights according to the terms and conditions of the agreement between ASSIGNOR and ASSIGNEE executed on July 14, 2004;

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE, ASSIGNOR's entire right, title and interest in and to said Patent Rights, and the right, as permitted under applicable laws, to file any and all divisions, reissues, continuations and extensions therefrom, including the right to file additional applications directly in the name of ASSIGNEE and, to the extent permitted under law, to claim priority rights deriving from any application listed in said Patent Rights by virtue of international convention, treaty or otherwise; and

ASSIGNOR further authorizes the Commissioner for Patents and Trademarks of the United States, and any official of any country or jurisdiction foreign to the United States whose duty it is to record the rights to patents and patent applications and title thereto, to record the right to the patents and patent applications listed in the annexed SCHEDULE OF PATENTS/PATENT APPLICATIONS as the property of ASSIGNEE; and ASSIGNOR hereby authorizes and requests the Commissioner for Patents and Trademarks to issue all letters patent on or resulting from said applications to ASSIGNEE.

ASSIGNOR  
AT&T WIRELESS SERVICES, INC.

By [Signature]  
Name: Jerry Gnuschke  
Title: Chief Counsel, Patent  
Dated: 9/9/04

ASSIGNEE  
CLEARWIRE CORPORATION

By [Signature]  
Name: John Saw  
Title: VP  
Dated: 9/16/04

State of Washington )  
County of King ) ss.

I certify that I know or have satisfactory evidence that Jerry Gnuschke is the person who appeared before me, and said person acknowledged that he signed this instrument, on oath stated that he was authorized to execute the instrument, and acknowledged it as the legal counsel of (ASSIGNOR), to be the free and voluntary act of said corporation for the uses and purposes mentioned in the instrument.



Dated 9/9/04  
Signature of Notary Public [Signature]  
Printed Name Roxann Smith  
My appointment expires 4-15-06

State of Washington )  
County of King ) ss.

I certify that I know or have satisfactory evidence that John Saw is the person who appeared before me, and said person acknowledged that he signed this instrument, on oath stated that he was authorized to execute the instrument, and acknowledged it as the Vice President of (ASSIGNEE), to be the free and voluntary act of said corporation for the uses and purposes mentioned in the instrument.



Dated 9/16/04  
Signature of Notary Public [Signature]  
Printed Name Camela K Kriner  
My appointment expires 7/19/08

<b>SCHEDULE OF PATENTS/PATENT APPLICATIONS</b>		
<b>UNITED STATES PATENTS</b>		
<b>Patent No.</b>	<b>Title</b>	<b>Issue Date</b>
5,799,000	Delay Compensation	08/25/1998
5,859,985	Arbitration Controller for Providing Arbitration on a Multipoint High Speed Serial BUS Using Drivers Having Output Enable Pins	01/12/1999
5,875,208	Delay compensation in a Discrete Multitone Spread Spectrum Communications System	02/23/1999
5,907,577	Delay Compensation	05/25/1999
5,914,981	Method to Indicate Synchronization Lock of a Remote Station with a Base Station for a Discrete Multitone Spread Spectrum Communications System	06/22/1999
5,943,375	Method to Indicate Synchronization Lock of a Remote Station with a Base Station	08/24/1999
5,987,338	Remote Wireless Unit Having Reduced Power Operating Mode	11/16/1999
6,084,932	Method to Indicate Synchronization Lock of a Remote Station with a Base Station for a Discrete Multitone Spread Spectrum Communications System	07/04/2000
6,216,019 B1	Remote Wireless Unit Having Reduced Power Operating Mode	04/10/2001
6,289,037 B1	Out of Channel Cyclic Redundancy Code Method for a Discrete Multitone Spread Spectrum Communications System	09/11/2001
6,333,937 B1	Access Retry Method for Shared Channel Wireless Communications Links	12/25/2001
6,347,236 B1	Remote Wireless Unit Having Reduced Power Operating Mode for a Discrete Multitone Spread Spectrum Communications System	02/12/2002

6,389,474 B1	Method and Apparatus for Accessing a Shared Channel in a Wireless Network Using a Time Slot Allocation Technique Based on Detecting the Usage of the Channel During a Round Trip Interval	05/14/2002
6,487,235 B2	Delay Compensation	11/26/2002
6,501,771 B2	Delay Compensation	12/31/2002
6,629,261 B1	Enhanced Data Link Layer Selective Reject Mechanism in Noisy Wireless Environment	09/30/2003
6,639,935 B2	Out of Channel Cyclic Redundancy Code Method for a Discrete Multitone Spread Spectrum Communications System	10/28/2003
6,643,281 B1	Synchronization Preamble Method for OFDM Waveforms in a Communications System	11/04/2003
6,711,416 B1	Fixed Wireless Communication System Having Power Control for Downlink Data Traffic	03/23/2004

UNITED STATES PATENT APPLICATIONS		
Application No.	Title	Filing Date
09/572,193	Design for Scalable Network Management Systems	5/17/2000
09/592,820	System and Method for Broadcasting Timing Information to Remote Units in a Wireless Multiple Access Network	6/12/2000
09/594,172	Reverse Tunneling Methods and Apparatus for Use With Private Computer Networks	6/13/2000
09/597,016	Polling Methods for Use in a Wireless Communication System	6/20/2000
09/597,043	Establishing a Communication Channel in a Wireless Network	6/20/2000
09/597,044	Methods and Apparatus for Dynamically Assigning Time Slots in a Wireless Communication System	6/20/2000
09/609,021	Method and Apparatus for Use in Reducing Overutilization of RF Communication System Resources	6/30/2000

09/777,783	A Real-Time System for Measuring the Ricean K-Factor	2/6/2001
09/784,979	Method and Apparatus for Controlling Access to a Communication Channel	2/16/2001
09/918,566	Method for Seamless Port Capability for an Alternative Service Provider	8/1/2001
09/987,955	RTP, UDP, IP Header Compression on the Circuit Switched Type Airlink Access	11/16/2001
10/075,166	Location Optimization and Base Assignment Tool for Creating Optimal Switch-Base Station Networks in the Wireless Industry	2/13/2002
10/121,091	Methods and Apparatus for Masking Destination Addresses to Reduce Traffic Over a Communication Link (as amended)	4/11/2002
10/272,272	Delay Compensation	10/17/2002
10/894,257	Delay Compensation	07/17/2004
10/917,825	Methods and Apparatus for Dynamically Assigning Time Slots in a Wireless Communication System	08/13/2004

INTERNATIONAL PATENTS			
Country/Jurisdiction	Patent No.	Title	Issue Date
Canada	2 228 708	An Arbitration Controller for Providing Arbitration on a Multipoint High Speed Serial BUS	10/30/2001
Canada	2 262 359	Access Retry Method for Shared Channel Wireless Communications Links	12/31/2002
Canada	2 262 360	Synchronization Preamble Method for OFDM Waveforms in a Communications Systems	10/22/2002
Mexico	212575	Arbitration Controller for Providing Arbitration on a Multipoint High Speed Serial BUS Using Drivers Having Output Enable Pins	1/16/2003

Japan	3309072	Arbitration Controller for Providing Arbitration on a Multipoint High Speed Serial BUS Using Drivers Having Output Enable Pins	5/17/2002
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INTERNATIONAL PATENT APPLICATIONS			
Country/Jurisdiction	Application No.	Title	Filing Date
Europe	98104904.2	Arbitration Controller for Providing Arbitration on a Multipoint High Speed Serial BUS Using Drivers Having Output Enable Pins	3/18/1998
Brazil	9917436-7	FDD Forward Link Beamforming Method for a FDD Communications System	2/26/1999
Mexico	992051	FDD Forward Link Beamforming Method for a FDD Communications System	3/2/1999
Brazil	9915665-2	Synchronization Preamble Method for OFDM Waveforms in a Communications Systems	2/26/1999
Mexico	992052	Synchronization Preamble Method for OFDM Waveforms in a Communications Systems	3/2/1999
Brazil	P19917145-7	Access Retry Method for Shared Channel Wireless Communications Links	2/26/1999
Mexico	992044	Access Retry Method for Shared Channel Wireless Communications Links	3/2/1999
Canada	2,311,910	Design for Scalable Network Management Systems	12/23/2000
Canada	2,328,054	Collision-Free Multiple Access Reservation Scheme for Multi-Tone Modulation Links	6/17/2001

Canada	2,328,800	Detection of Cross-Connection Between A Wireless Loop Network and Another Loop Network at a Subscriber's Premises	12/19/2000
Canada	2,376,014	System and Method for Data Scrambling to Reduce the Crest Factor in an OFDM Waveform	6/9/2000
Canada	2,415,632	Multicarrier Transmission Using Polarized Antennae	06/13/2001
Europe	00311339.6	Detection of Cross-Connection Between a Wireless Loop Network and Another Loop Network at a Subscriber's Premises	12/18/2000
Mexico	001429	Detection of Cross-Connection Between a Wireless Loop Network and Another Loop Network at a Subscriber's Premises	2/7/2001
Brazil	0100360-7	Detection of Cross-Connection Between a Wireless Loop Network and Another Loop Network at a Subscriber's Premises	2/5/2001
Mexico	2001/013065	System and Method for Data Scrambling to Reduce the Crest Factor in an OFDM Waveform	12/17/2001
Brazil	P10011789-7	System and Method for Data Scrambling to Reduce the Crest Factor in an OFDM Waveform	12/20/2001
Europe	00111965.0	Design for Scalable Network Management Systems	6/16/2000
Mexico	018684	Design for Scalable Network Management Systems	6/20/2000
Brazil	0003318-9	Design for Scalable Network Management Systems	6/16/2000

PCT	PCT/US01/50206	Synchronization of Encryption in a Wireless Communication System	12/19/2001
Canada	2467522	Synchronization of Encryption in a Wireless Communication System	12/19/2001
PCT	PCT/US01/43262	Enhanced Data Link Layer Selective Reject Mechanism in Noisy Wireless Environment	11/20/2001
Canada	presently unknown	Enhanced Data Link Layer Selective Reject Mechanism in Noisy Wireless Environment	05/19/2004
Brazil	0005881-5	Collision-Free Multiple Access Reservation Scheme for Multi-Tone Modulation Links	12/14/2000
Japan	2000-378425	Collision-Free Multiple Access Reservation Scheme for Multi-Tone Modulation Links	12/13/2000
Canada	2399385	A Real-Time System for Measuring the Ricean K-Factor	2/7/2001
Mexico	01908893.9	A Real-Time System for Measuring the Ricean K-Factor	2/7/2001
Brazil	0108183-7	A Real-Time System for Measuring the Ricean K-Factor	8/8/2002
Europe	01952153.3	Adaptive Dual-Polarization Communication of Orthogonal Frequency Division Multiplexed Signals	6/13/2001
PCT	PCT/US02/24444	Method for Seamless Port Capability for an Alternative Service Provider	8/1/2002
Canada	2456137	Method for Seamless Port Capability for an Alternative Service Provider	2/2/2004



Europe	02756886.4-2414	Method for Seamless Port Capability for an Alternative Service Provider	2/9/2004
PCT	PCT/US02/33242	Method for Synchronization of Received Signals	10/18/2002

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